ABSTRACT OF THE DISCLOSURE

An internal combustion engine is provided with a variable mechanism capable of adjusting the amount of intake air introduced into each cylinder by controlling the operation angle of intake valves. In a low-load region, the intake valve operation angle is minimized, and the amount of intake air is controlled on the basis of the degree of throttle opening. In the low-load region, the operation angle of each valve is set so that there is no period during which both an intake valve and an exhaust valve are open. In a high-load region where the intake pipe pressure becomes equal to the atmospheric pressure, the amount of intake air is controlled on the basis of the operation angle. During this process, the degree of throttle opening is controlled so that the intake pipe pressure can be kept at the atmospheric pressure before and after the intake amount control based on the operation angle is performed. Therefore, fluctuations in the intake pipe pressure at the time of a change of the operation angle can be reduced or prevented, and the amount of intake air can be controlled with good precision. Thus, the torque shock can be reduced or prevented.